



P.B.581C - Patentlaan 2  
2280 HV Rijswijk (ZH)  
+31 70 340 2040  
TX 31651 epo nl  
FAX +31 70 340 3016

Europäisches  
Patentamt

Zweigstelle  
in Den Haag  
Recherchen-  
abteilung

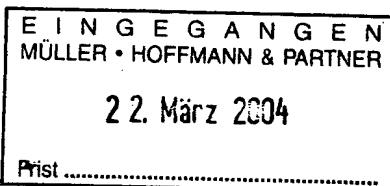
European  
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des brevets

Département à  
La Haye  
Division de la  
recherche

Müller - Hoffmann & Partner  
Patentanwälte,  
Innere Wiener Strasse 17  
81667 München  
ALLEMAGNE



Datum/Date

23.03.04

Zeichen/Ref./Réf. 55506 Mü/rs	Anmeldung Nr./Application No./Demande n°./Patent Nr./Patent No./Brevet n°. 03028580.3-1217-
Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire SONY CORPORATION	

## COMMUNICATION

The European Patent Office herewith transmits as an enclosure the European search report for the above-mentioned European patent application.

If applicable, copies of the documents cited in the European search report are attached.

Additional set(s) of copies of the documents cited in the European search report is (are) enclosed as well.

The following specifications given by the applicant have been approved by the Search Division:

abstract

title

The abstract was modified by the Search Division and the definitive text is attached to this communication.

The following figure will be published together with the abstract:

1

## REFUND OF THE SEARCH FEE

If applicable under Article 10 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.





which under Rule 45 of the European Patent Convention  
shall be considered, for the purposes of subsequent  
proceedings, as the European search report

<b>DOCUMENTS CONSIDERED TO BE RELEVANT</b>			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
Y	EP 0 516 086 A (SONY) 2 December 1992 (1992-12-02) * page 3, line 57 – page 4, line 24 * * page 5, line 18 – line 23 * * page 5, line 58 – page 6, line 5; figures 1,2 * ----- & JP 04 353621 A (SONY) 8 December 1992 (1992-12-08)	1-6	G11B5/66
Y	JP 2001 143236 A (SONY) 25 May 2001 (2001-05-25) * page 2, paragraph 8 * * page 4, paragraph 24 * * page 5, paragraph 39 * * page 7; table 1 * * claims 1,3,5; figure 1 * -----	1-6	
Y	US 2002/168550 A1 (ONODERA ET AL.) 14 November 2002 (2002-11-14) * paragraph '0073! * * paragraph '0156! * * paragraph '0183! * * paragraph '0189! * * claim 1; figures 1,2; tables 3,4 * -----	3	TECHNICAL FIELDS SEARCHED (Int.Cl.7) G11B
<b>INCOMPLETE SEARCH</b>			
The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC to such an extent that a meaningful search into the state of the art cannot be carried out, or can only be carried out partially, for these claims.			
Claims searched completely :			
Claims searched incompletely :			
Claims not searched :			
Reason for the limitation of the search:			
see sheet C			
2	Place of search	Date of completion of the search	Examiner
	The Hague	3 March 2004	Magrizos, S
CATEGORY OF CITED DOCUMENTS			
<p>X : particularly relevant if taken alone      Y : particularly relevant if combined with another document of the same category      A : technological background      O : non-written disclosure      P : intermediate document</p>			
<p>T : theory or principle underlying the invention      E : earlier patent document, but published on, or after the filing date      D : document cited in the application      L : document cited for other reasons</p> <p>.....</p> <p>&amp; : member of the same patent family, corresponding document</p>			
EPO FORM 1503/03.82 (P04C07)			



Claim(s) searched incompletely:

1-6

Reason for the limitation of the search:

Present claims 1-6 relate to a product defined (*inter alia*) by reference to the following parameter:

P1: the product of residual magnetisation and film thickness

The use of this parameter in the present context is considered to lead to a lack of clarity within the meaning of Article 84 EPC. It is impossible to compare the parameter the applicant has chosen to employ with what is set out in the prior art. The lack of clarity is such as to render a meaningful complete search impossible. Consequently, the search has been restricted to the embodiments mentioned in the Examples.

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 03 02 8580

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on. The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

03-03-2004

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
EP 0516086	A	02-12-1992		JP 4353621 A JP 4353622 A AT 160044 T CA 2070070 A1 DE 69222975 D1 DE 69222975 T2 EP 0516086 A2 KR 263020 B1 JP 5182168 A		08-12-1992 08-12-1992 15-11-1997 01-12-1992 11-12-1997 28-05-1998 02-12-1992 01-08-2000 23-07-1993
JP 4353621	A	08-12-1992		AT 160044 T CA 2070070 A1 DE 69222975 D1 DE 69222975 T2 EP 0516086 A2 KR 263020 B1		15-11-1997 01-12-1992 11-12-1997 28-05-1998 02-12-1992 01-08-2000
JP 2001143236	A	25-05-2001		NONE		
US 2002168550	A1	14-11-2002		JP 2002092862 A JP 2002100026 A JP 2002100029 A		29-03-2002 05-04-2002 05-04-2002